

ABSTRACT OF THE DISCLOSURE

A demodulation apparatus that shortens demodulation time and performs efficient high-quality demodulation control. A digital signal generating section generates digital signals corresponding to phase axes from a modulated input signal. A frequency correction value outputting section outputs a frequency correction value. A frequency correcting section gives a frequency offset to digital signals on the basis of a frequency correction value to generate frequency-corrected signals. A timing recovering section performs timing recovery by extracting symbol timing for frequency-corrected signals. A C/N detecting section detecting C/N from a symbol. An optimum frequency correction value determining section treats a frequency correction value corresponding to the maximum C/N value as an optimum frequency correction value. A carrier recovering section performs carrier recovery by correcting finally a shift in the frequency of a signal on which a frequency correction by the use of an optimum frequency correction value and timing recovery have been made.

A synchronization detecting section makes an error correction on a symbol and detects a unique word.